

Figure 1

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Figure 2c

Title: Genes Integrating Signal Transduction Pathways
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Atty/Agent: Jennifer G. Moitoso
Express Mail Mailing Label No. EV 596440685US
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Figure 2A

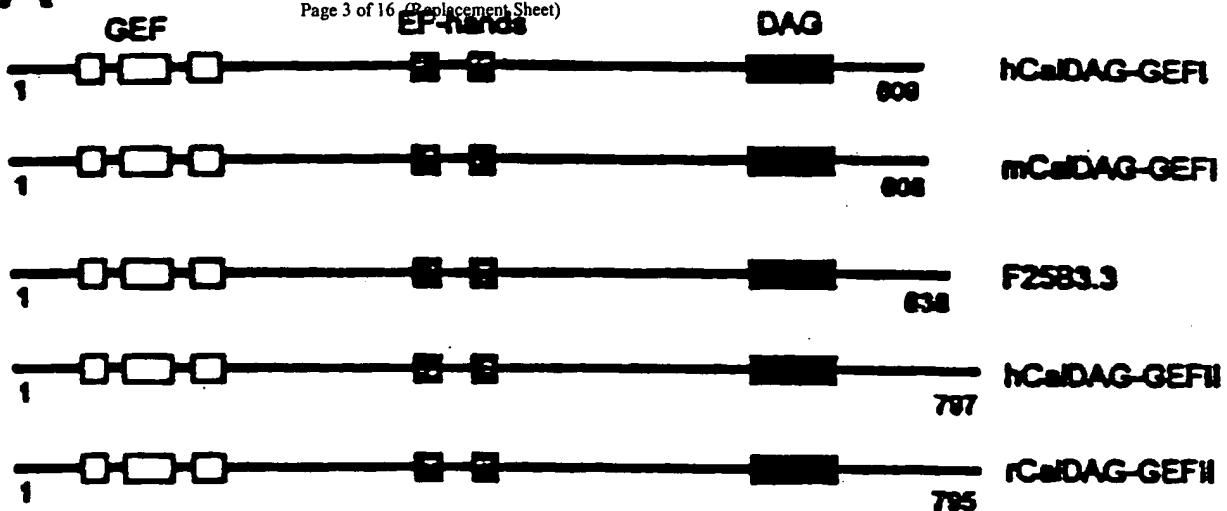


Figure 2B

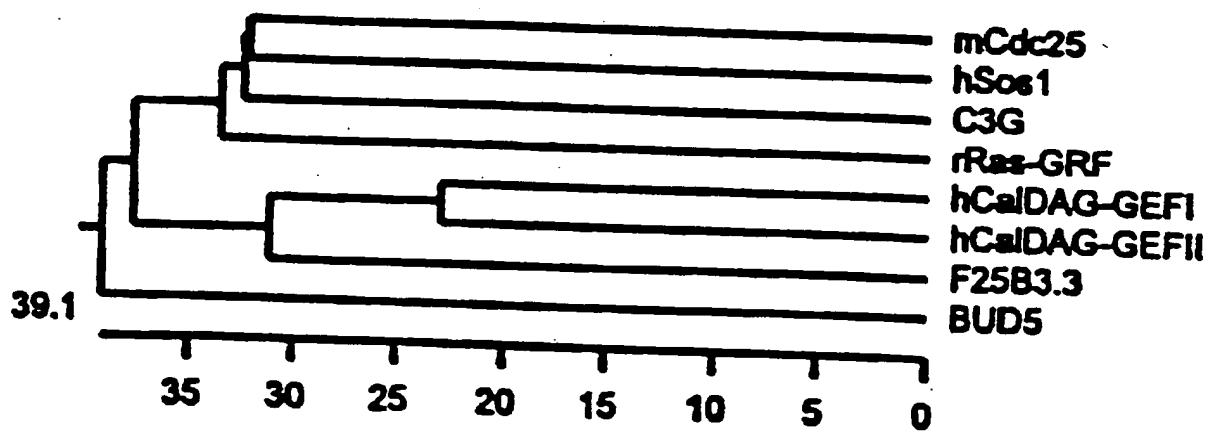


Figure 2D-1

Figure 2D-2

Q A A K L L H I Y Q Q S R K D N S H S S L Q V K T C H L V Y Y H I S A F P A E F D L N P E L A E D I 0 1
Q L A S K L L H E Y Q Q S R K D N S H S S L Q V K T C H L V Y Y H I S A F P A E F D L N P E L A E D I 200
D N L E P M E L A E H L T Y E Y S F C K I L F Q D Y H S F Y T H G C T Y D H P V L E R F T I S L F 200
D N L E P M E L A E H L T Y E Y S F C K I L F Q D Y H S F Y T H G C T Y D H P V L E R F T I S L F 200
S N S S I S E L K E T H S W V S P E T I K L H E G L T E L Y T A T C H N Y E R L A A C Y C F R 300
S N S S I S E L K E T H S W V S P D T I K L H E G L T E L Y T A T C H N Y E R L A A C Y C F R 300
R P P V Q A H P D L L S L L T Y S L D Q Y T T E D E L Y Q L S L Q R E P R E S S S P T S P T S C T P 400
R P P V Q A H P D L L S L L T Y S L D Q Y T T E D E L Y Q L S L Q R E P R E S S S P T S P T S C T P 400
F Q I I E G H F P Y L S A F G D L S Q H Q Q C I S E E E M Y S Y F L E S S S V L G G R H G F V H H 500
F Q I I E G H F P Y L S A F G D L S Q H Q Q C I S E E E M Y S Y F L E S S S V L G G R H G F V H H 500
R A Q S V Y S L E C S A P S P S P H H S H R A F S P S L P K P P G R E S S R P P E I R E E E Y Q T Y 600
R A Q S V Y S L E C S A P S P S P H H S H R A F S P S L P K P P G R E S S R P P E I R E E E Y Q E V 600
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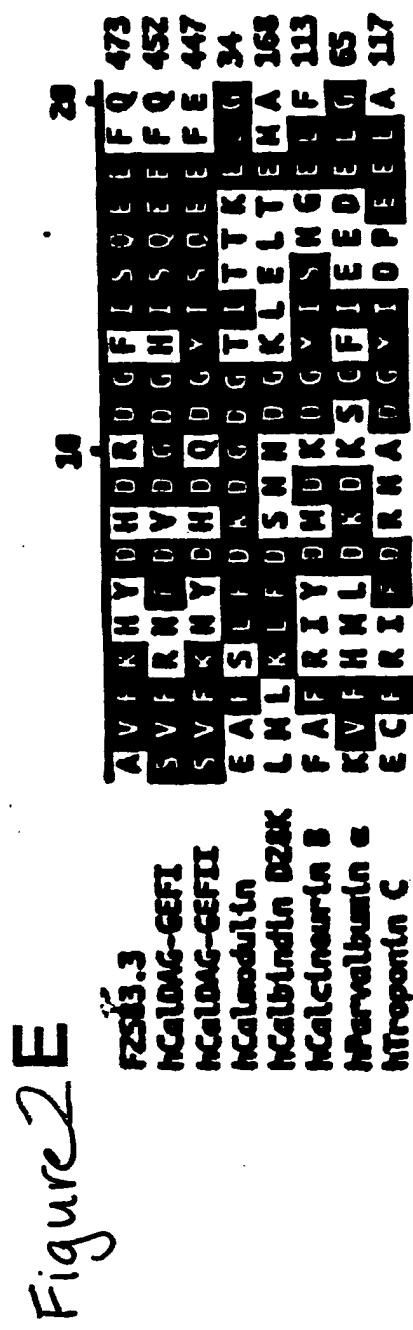
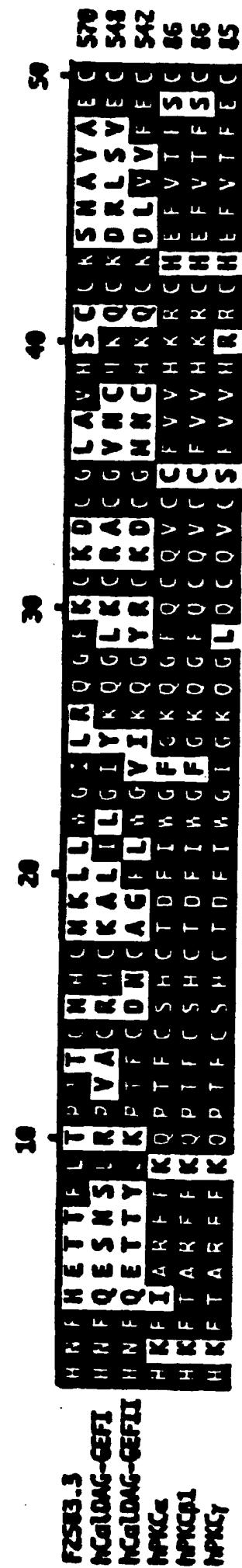


Figure 2F



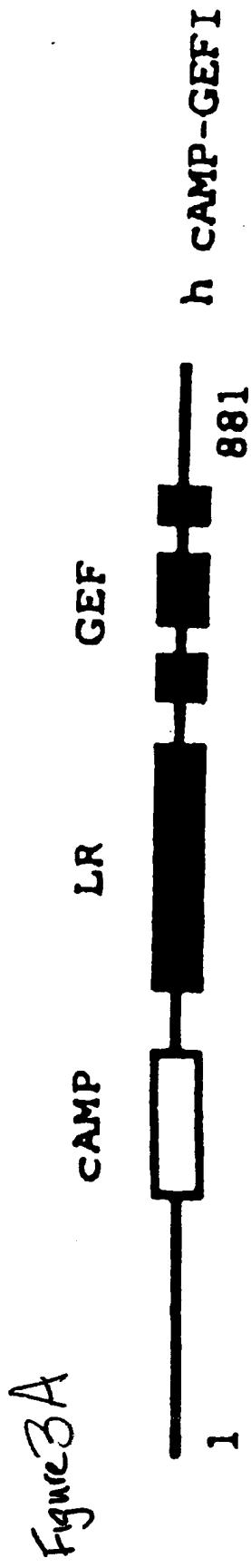


Figure
3B

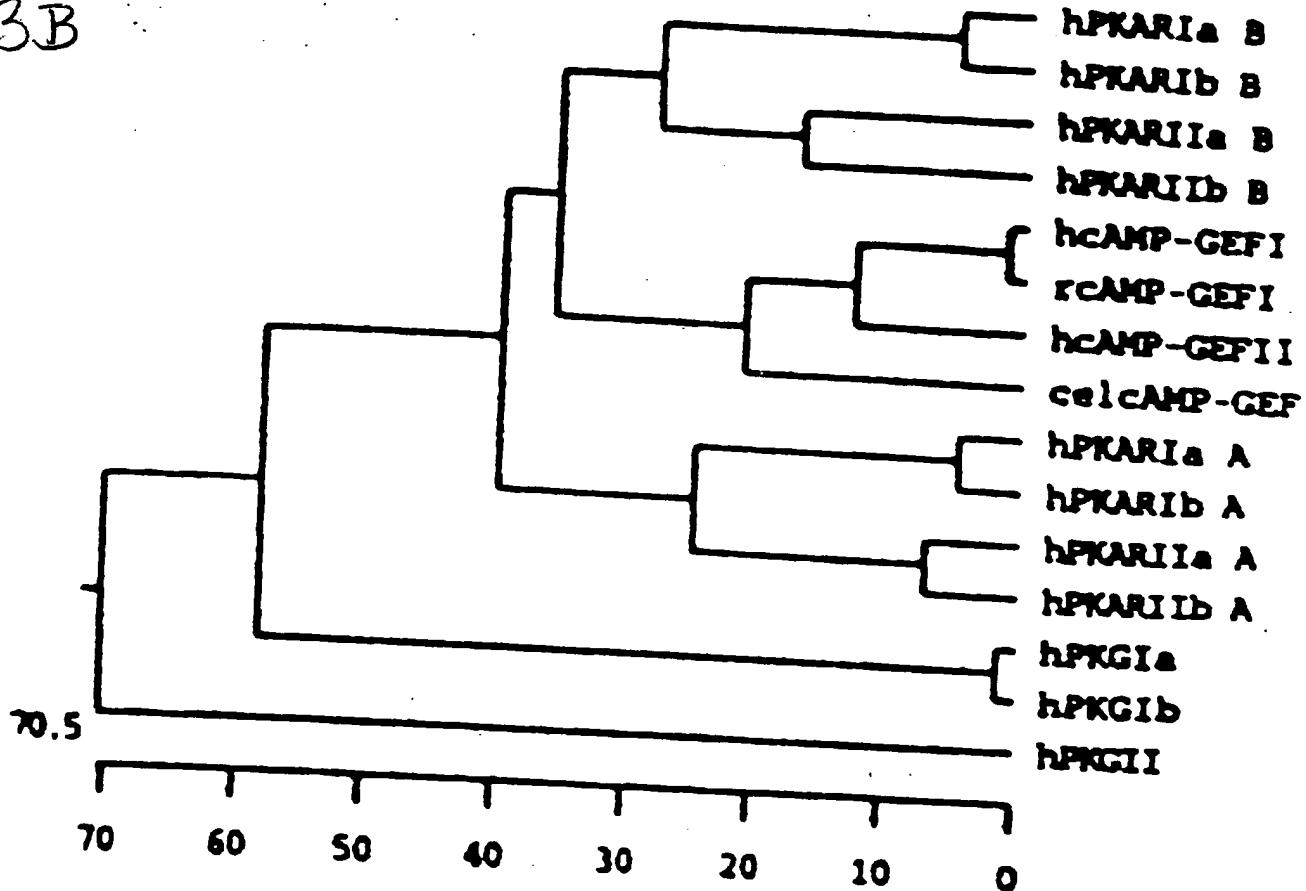


Figure 3C

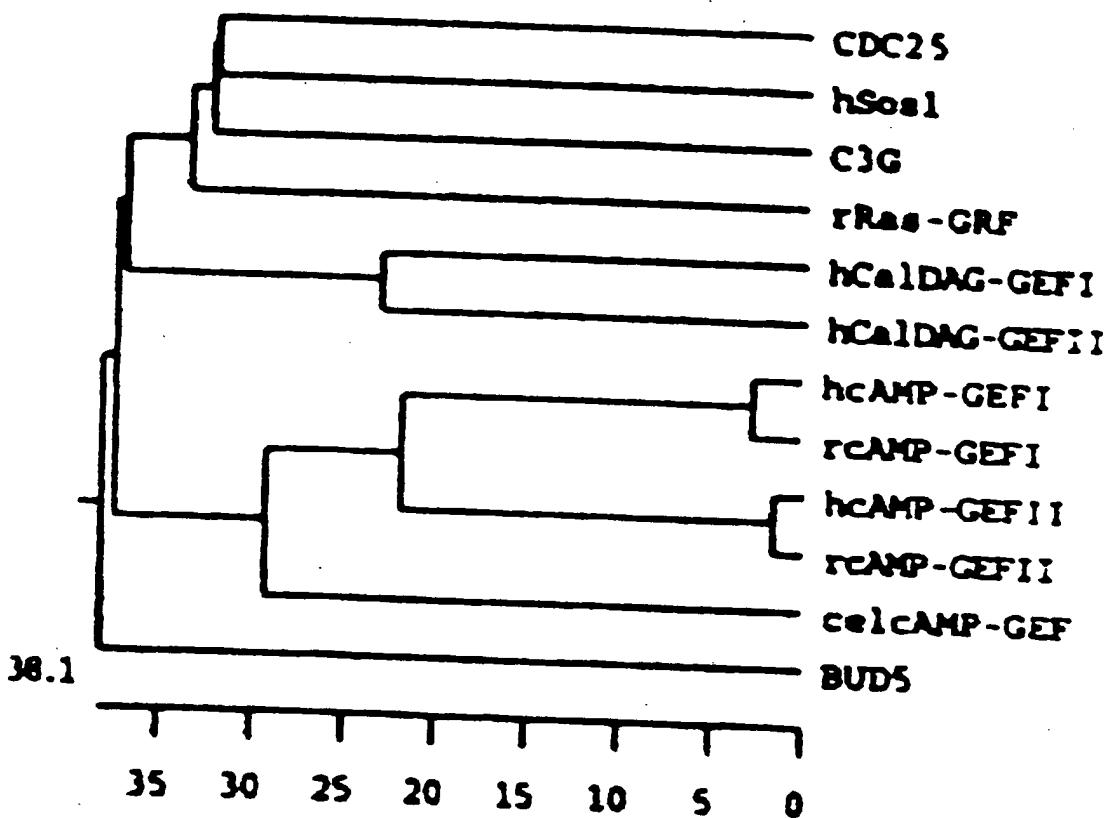


Figure
3D-1

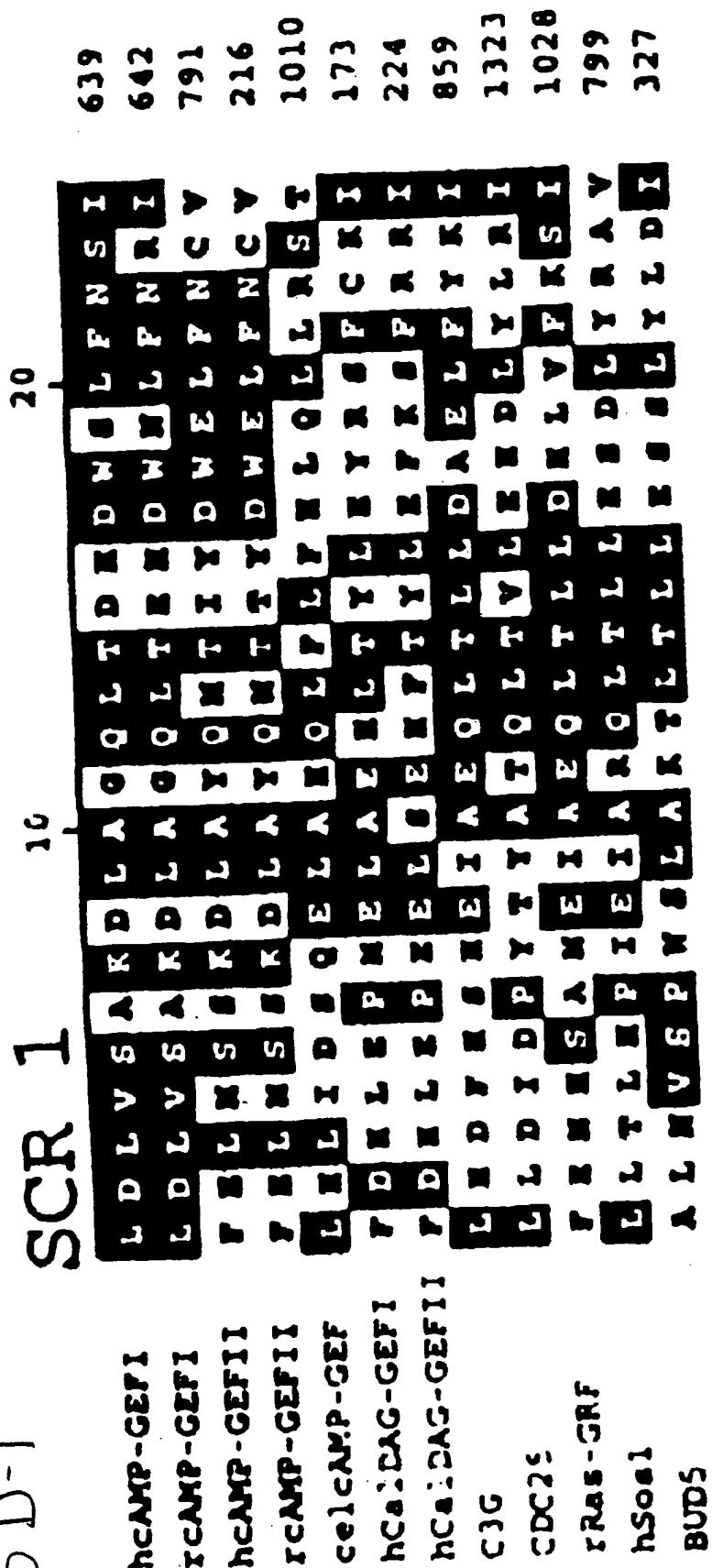


Figure
3D-2

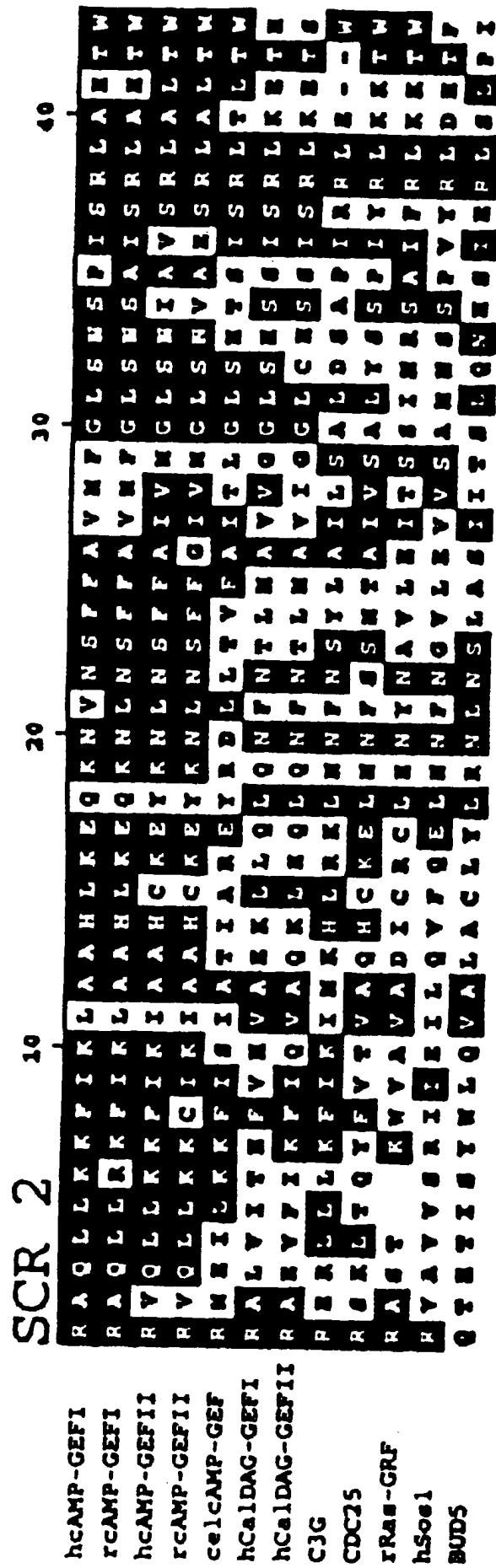


Figure 3 D-3

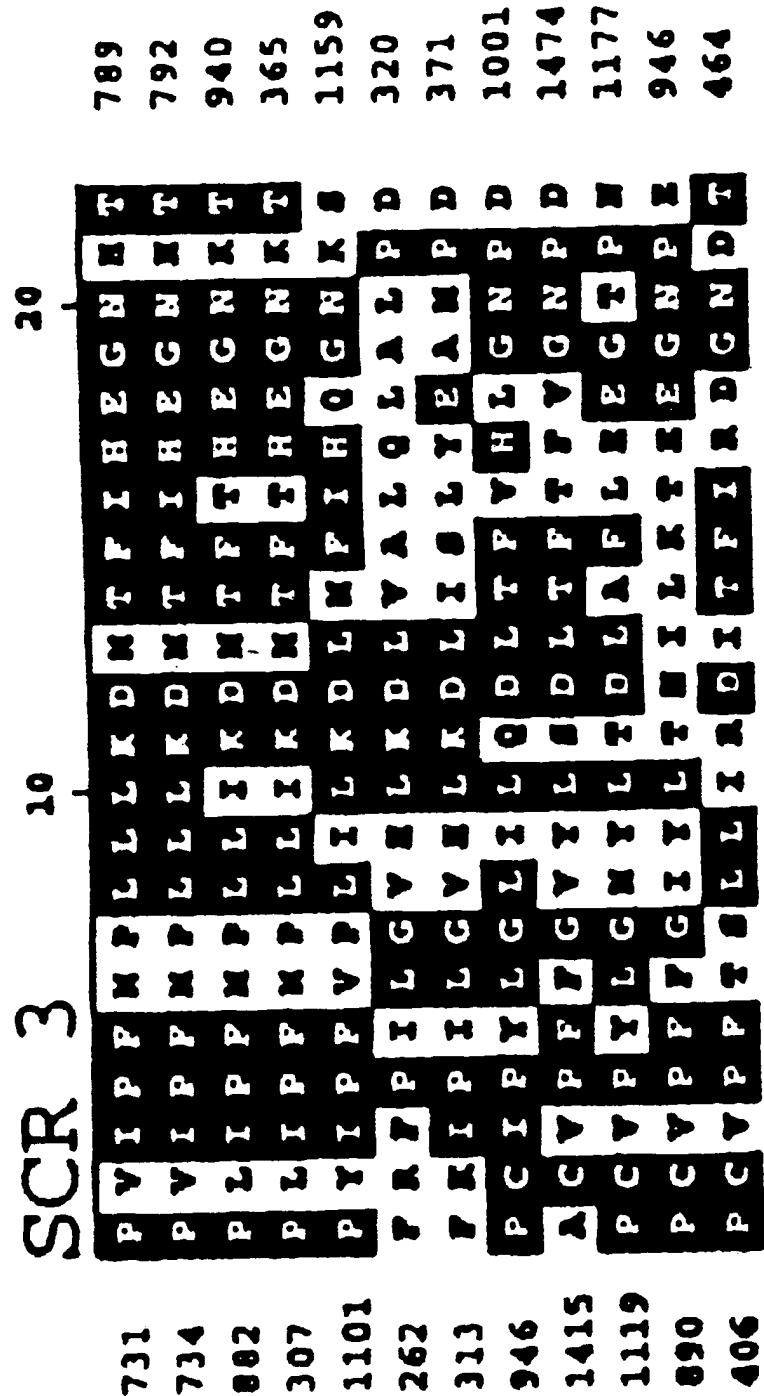


Figure 3E-1

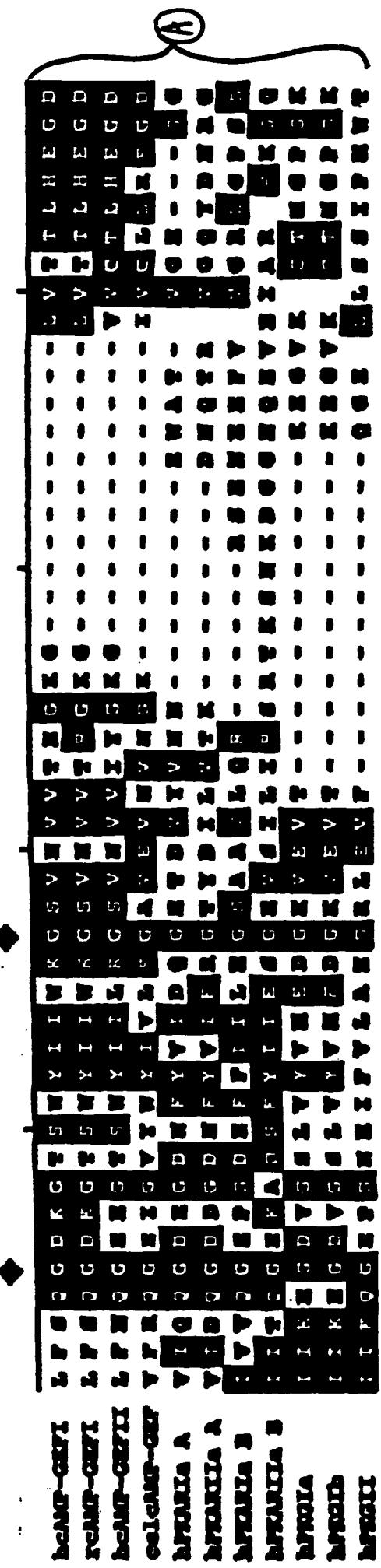


Figure 3E-2

Figure 3 F-1

bcAMP-GEFI M V L - - - - - R R M H R P R S - - - - -
bcAMP-GEFII M V A A A A S S S S A E W I A C L D K R P L E R S S E D V D I I F T R

bcAMP-GEFI - - - - - - - - - H Q H P S - - C I Q G - - - - -
bcAMP-GEFII Y A V L A G S L D V K V S T S S N C D A V T I C T L G I S T A F G R S I

bcAMP-GEFI - - - - - - - - - T P L T M S S E S L D P S E S L E Q
bcAMP-GEFII P Y G V M E T G S H H D R I P D R E N T P L I E P H V P L R P A N T I T K

bcAMP-GEFI L V D G I L A L G L O V E S R I S Q V V G I C Q V L L D E G A L C H V K N D
bcAMP-GEFII L V D W W W W Q Q T P C V E S R I T Q A V C N W Q V L L E D G V L N H V D Q E

bcAMP-GEFI S Q R G P D A L L T V A L L R K P P G Q R T D E E L D L I P F E E L L H I K A
bcAMP-GEFII S Q M G P D A M M M I L L R K P P G Q R T V D D L E I T Y E E L L H I K A

bcAMP-GEFI C S V H V V I T H G K G L V T T L H E G D D F G Q L A L V N D A P R A A T I
bcAMP-GEFII C S V H V V I Y G K G V V C T L H E G D D F G K L A L V N D A P R A A S I

bcAMP-GEFI A S Q G A - G P S R P P T P G R H R Y T V M S G T P D K I L E L L L E A M
bcAMP-GEFII V P A G H R A S H Q G H S Q P Q Q K Y T V M S G T P E K I L E K F L E T I

bcAMP-GEFI C G S E Q E R S T Y V C M K R Q Q I L R L V S Q M V A L Y G S M L E T D P
bcAMP-GEFII Q G T E Q E K N D Y A L M N K R R V I R L V L Q W A A M Y G D L L Q E D D

bcAMP-GEFI S P Q M K A R E L P V W L P H O D E P L P G S S C A I Q V G D K V P Y D I
bcAMP-GEFII A P Q K E H K V L L L Q Q F H T G D E R - A Q K R Q P I R G S D E V L P K V

bcAMP-GEFI C D A I G L Q P D A R G V A T S L G L H E R L P V V V P Q E V H E L I P H
bcAMP-GEFII G E K V V L K P H D V S V Y T T L T I M G R L F A C P R E Q F D S L T P L

bcAMP-GEFI H Y V L C P Q H L R D V T T A H L E R F M R R F H E L O Y W V A T E L C L
bcAMP-GEFII Y H T F G R H M P K K - T T A H L D L P L R R P H E I O P W V V T E I C L

bcAMP-GEFI R L A H T W E R L P H K V R K L Y S A L E R I L L D P S H M H R V Y R L A L
bcAMP-GEFII R L A L T W E K L P S K P F K P Y A E P E S L N D P S R M H R A Y R L T V

bcAMP-GEFI A A R M L H H C R S H M P V P L S P L R S R V S H L K E D S Q V A R I S T
bcAMP-GEFII T A R T V R Y Y R S Q - - P P M P -

Figure 3F-2

LKEVKAPEKPFPHPLLQICLCSYQLLLE----- 20

LDNTPREATIVTRESKELLRLR-----W----- 32

ASTERAVLRAAGRQLQQLLATECPMLIRDRKTYHLRLTYRQCCSGRE 92
VPSERKILRACKILRRAILSRAEEMIRDRKTYHLKTYRQCCVQTE 240

WAFQDDEDAQFTTFFPGPEPE-----PVGTHEN-----EELAKAVALL 166
KFPDK-YLFYRFLDDEEEDAPLPTEEEKECDDEELQDTHLL 319

VANLSESVKRELAAVLLPEPEHESKAGTVLFSQGDKGTSWYIILK 246
LSHLSTTVKRELAGVLPESMAKGGTVLPHQCEEGTSWYIILK 399

ILREYHNCFLRVDEQDFHRIIKIDVEAKTMRLEEEEGKVVVLVLER 326
VLRDNDCHFPLRVDEKDPHRIILRDVEANTVRLKEEDQDVLVLER 479

GLDSSANDPKETPLSDPLLTHRVPFMPSAQQLCAALLNNPHVEPA 405
RLEATLNEATDSVLHDFINMMHCVFMPPNTOLCPALVANYHAQPS 559

VATSFLHKLSDLVGRDTRLSMLRQMPERRRCCRLENGCGNA 485
VSKAFLKEEFPYVSVDIARHIAALKEQOLPELEKIVKQISE-DAK 638

CRPDNSVLTQLPVATASVREVMKAALAGQEDGNTKEGQVLVVKNSA 565
YCKMDHTTTIRVPUATSVKEVISAVALDKLGSGEGLIIVKNSSG 717

PDDQLGPTVGSAEGLDLVSAKDLAGOLTDKDMSLPEFNSIHQVELI 645
PEQEGPTVCTVGTFLKSSKDLATQNTIYDWELFNCVHLELI 797

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CSQLSKRVQQLKKPIELAANCKEYKMLNSPPAIVMGLSNIAVS 876

AKLSPFVIPFNPPLLKKDNTPIKEGNNHTLVENLIPERKMRHNAK 805
AKLEPPLIPFNPPLLKKDNTPTHEGNNTPIDNLVNPERKMRHIAN 956

CSEQSLSTRESPASTWAYVQQLKVIDNQRELRLSRLSRELEP 881
---DAAQAKKQDVRSTYKOLNVIDNORTLSEQNSHRLEPFRP 1011

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